IN THE CLAIMS:

Please amend the claims as follows:

1. **(Currently amended)** A method, comprising overlapping a plurality of direct-sequence spread-spectrum signals using carrier frequencies that are i) each precisely an integer multiple of a bit rate and ii) orthogonally spaced relative to an integral multiple of a the bit rate rather than a chip rate,

wherein the chip rate is an integer multiple of the bit rate and is greater than or equal to two.

2. **(Original)** A method of claim 1, further comprising common frequency-hopping encoding said plurality of direct-sequence spread-spectrum signals.

3. **(Original)** The method of claim 1, further comprising individual, differential frequency-hopping encoding each of said plurality of direct-sequence spread-spectrum signals.

4. **(Currently amended)** The method of claim 1, wherein ~~the~~ frequency-hopping modulation is performed in a continuous-phase manner.

5. **(Original)** The method of claim 1, further comprising time-hopping encoding said plurality of direct-sequence spread-spectrum signals.

6. **(Original)** The method of claim 5, further comprising frequency-hopping encoding said plurality of direct-sequence spread-spectrum signals.

7. **(Original)** The method of claim 1, wherein overlapping includes synchronously allocating each of a plurality of users to one of a plurality of orthogonal channels.

8. **(Previously presented)** The method of claim 1, wherein overlapping includes encoding a frequency shift in a subset of bits that define a code word.

9. **(Previously presented)** The method of claim 1, wherein overlapping includes establishing a bit- clock synchronization; and

further comprising multiplying an incoming signal by an estimate of a desired signal; and integrating a product over an integral multiple of a bit period rather than a chip rate.

10. **(Original)** The method of claim 1, further comprising retransmitting one of said plurality of direct-sequence spread-spectrum signals.

11. **(Original)** The method of claim 1, further comprising checking one of said plurality of direct-sequence spread-spectrum signals with an error-correcting code.

12-14. **(Canceled)**

15. **(Currently amended)** A computer program, comprising computer- or machine-readable program elements translatable for implementing a method of signal transmission including overlapping a plurality of direct-sequence spread-spectrum signals using carrier frequencies that are i) each precisely an integer multiple of a bit rate and ii) orthogonally spaced relative to an integral multiple of a the bit rate rather than a chip rate.

wherein the chip rate is an integer multiple of the bit rate and is greater than or equal to two.

16-24. **(Canceled)**

25. **(Currently amended)** A computer program comprising computer program means adapted to perform the steps of overlapping a plurality of direct-sequence spread-spectrum signals using carrier frequencies that are i) each precisely an integer multiple of a bit rate and ii) orthogonally spaced relative to an integral multiple of ~~a~~ the bit rate rather than a chip rate,

wherein the chip rate is an integer multiple of the bit rate and is greater than or equal to two.

26. **(Original)** A computer program as claimed in claim 25, embodied on a computer-readable medium.

27. **(Cancel)**

28. **(Currently amended)** A method, comprising, providing a direct-sequence spread-spectrum communication system that increases a number of users by utilizing a plurality of closely spaced orthogonal carriers that are i) each precisely an integer multiple of a bit rate and ii) produce overlapping spectra,

wherein a spacing of the plurality of orthogonal carriers is based on an integral multiple of the bit rate and not a chip rate and

wherein the chip rate is an integer multiple of the bit rate and is greater than or equal to two.

29. (Original) The method of claim 28, further comprising frequency-hopping encoding the overlapping spectra.

30. (Original) The method of claim 28, further comprising time-hopping encoding the overlapping spectra.

31. (Original) The method of claim 30, further comprising frequency-hopping encoding the overlapping spectra.

32. (Currently amended) A method, comprising overlapping a plurality of synchronous direct-sequence spread-spectrum signals using carrier frequencies with zero relative phase differences that are i) each precisely an integral multiple of 1/2 a bit rate and ii) orthogonally spaced relative to an integral ~~sub-multiples~~ multiple of ~~at least one~~ ½ the bit rate rather than a chip rate,

wherein the chip rate is an integral multiple of the bit rate and is greater than or equal to two.

33. (Currently amended) The method of claim 32, ~~wherein the plurality of synchronous direct-sequence spread-spectrum signals are overlapped relative to an integral sub-multiple of a common bit rate~~ further comprising common frequency-hopping encoding said plurality of direct-sequence spread-spectrum signals.

34. (Currently amended) A method, comprising overlapping a plurality of synchronous direct-sequence spread-spectrum signals using carrier frequencies with relative

phase differences that are i) each precisely an integral multiple of $1/2^x$ a bit rate, where x is a counting number and ii) orthogonally spaced relative to ~~one-half~~ the integral multiple of $1/2^x$ of a the bit rate rather than a chip rate,

wherein the chip rate is an integral multiple of the bit rate and is greater than or equal to two.

35. **(New)** The method of claim 32, further comprising time-hopping encoding said plurality of direct-sequence spread-spectrum signals.

36. **(New)** The method of claim 34 further comprising common frequency-hopping encoding said plurality of direct-sequence spread-spectrum signals.

37. **(New)** The method of claim 34, further comprising time-hopping encoding said plurality of direct-sequence spread-spectrum signals.